

Monitoring Lessons Learned

Colleen Hutson
Hutson Homes LLC

Contract monitor for IHODA

The most forgotten rule

- **807.2 Responsible Contractors**

- All contractors awarded contracts by weatherization sub-grantees must annually review their contractors against the federal contractor **disbarment** list accessed at <https://www.epls.gov/>.
- If a contractor is listed on the Excluded Parties List System website, sub-grantees should not enter into a contract for goods or services paid with DOE or LIHEAP funds.

The most mis-understood rule

Lead Test Performed	<input checked="" type="checkbox"/> A test for lead was performed.
Lead Found Inside	<input checked="" type="checkbox"/> Lead was found in the living space of the dwelling.
Lead Found Outside	<input checked="" type="checkbox"/> Lead was found on the outside of the dwelling.
Lead Safe Work Practices	<input checked="" type="checkbox"/> Lead safe work practices were used.
Lead Reported to Family	<input checked="" type="checkbox"/> A lead report was given to the resident family.
Pre-Blower Door Reading	<input type="checkbox"/> Unable to get a reading.
Pre-Blower Door	3375.00 CFM @ 50 pascals
Post-Blower Door	2480.00 CFM @ 50 pascals
High Efficiency Furnace	<input checked="" type="checkbox"/> No furnace final draft performed
Furnace Final Draft	0.000 pascals at 0 degrees Fahrenheit
Post Wx Continuous Mech. Ventilation Needed	35.000
Electric Water Heater	<input checked="" type="checkbox"/> Water heater draft does not apply
Water Heater Final Draft	0.000 pascals at 0 degrees Fahrenheit
Attic Insulation	13 R-value prior to weatherization
Wall Insulation	0 R-value prior to weatherization
Mobile Home Belly Insulation	0 R-value prior to weatherization
Energy Education Provided	<input checked="" type="checkbox"/> Energy education/materials were provided to the resident family.

Combustion			
62.2 N Factor	37		
62.2 ACHN	0.27		
TEC ACHN	0.43	Not applicable	
.4 ACH MVR (cfm50)	1980		
Outputs		Final documentation	
Whole house vent. req. (cfm):	60	If a fan was used to comply with 62.2, in what room is it located?	Bathroom
Local ventilation deficit (cfm):	7	Measured CFM of fan used to comply with ASHRAE 62.2:	30
Infiltration Credit (cfm):	37	Minutes fan is set to run per hour:	60
No need to ventilate rate (cfm):	1850	Continuous Mechanical Ventilation needed (cfm):	30

62.2 2016 Fan Flow

If the grey "X" is at or above the red line, the fan provides enough flow for 62.2

Fan CFM	Run Time (minutes)
30	55
40	45
60	30
80	22
100	18
120	16
130	15

My new favorite Rule

1.5 GAS RANGE AND OVEN SAFETY

SWS Details: 2.0100.1 Global Worker Safety, 2.0201.2 Combustion Safety - Make-up Air, 6.6005.2 Kitchen Range, 6.6005.4 Kitchen Range Hood within Dwelling Unit (All Building Types)

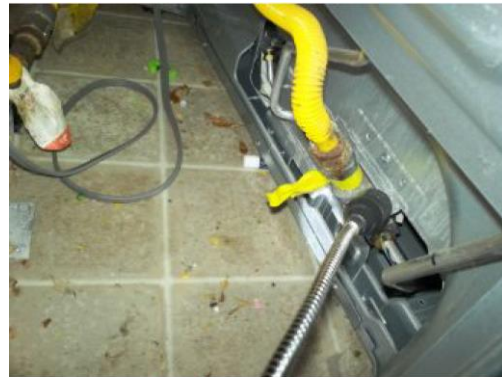
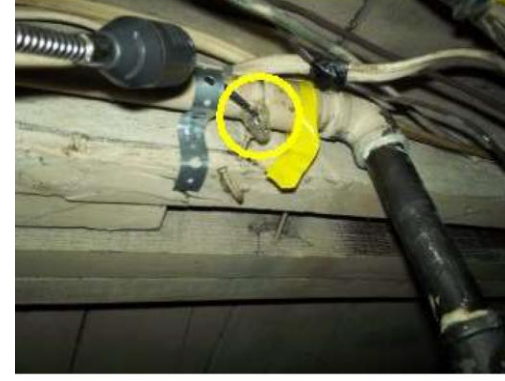
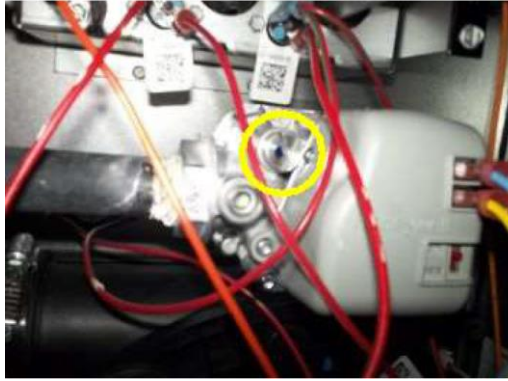
28

Health and Safety

Gas ovens can release CO, natural gas, or propane into a kitchen. Test the burners for safe combustion with these steps and do the recommended improvements.

1. Test for gas leaks in the gas piping in and around the range and oven and seal leaks.
2. Turn the oven burner and then range burners to high one-by-one. Inspect the flames and test them for CO. For the oven burner test at its outlet. For range burners, hold the test probe **approximately 8 inches above the flame.**
3. **If the CO reading for the oven exceeds 225 ppm or any of the range top burners exceed 100 ppm, clean and tune the burner.**
4. **For range tops, if after servicing, the CO level still exceeds 100 ppm, install a CO alarm in the same room as the appliance and perform client education on use of the range. Consider a kitchen rated CO alarm.**
5. **For ovens, if after servicing, the CO level still exceeds 225 ppm, install a CO alarm in the same room as the appliance. Additionally, install a kitchen exhaust fan (minimum 100 cfm) to vent the CO to the exterior OR replace the range if a fan is not an option. Consider a kitchen rated CO alarm.**
6. **DOE funds cannot be used to replace ranges.**

Rules we can agree on:



Gas leaks

Potential Gas leaks



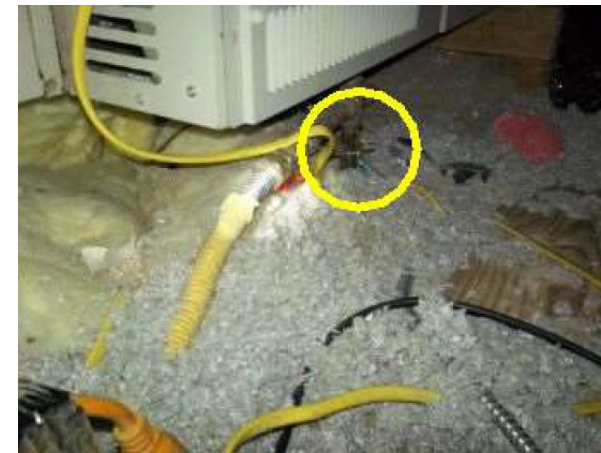
Shut off



Support/secure gas line attic



flex penetrates fire box



CSST: note around wire and clamp



62.2 feed; support



62.2



new sump discharge



VB incomplete front crawl



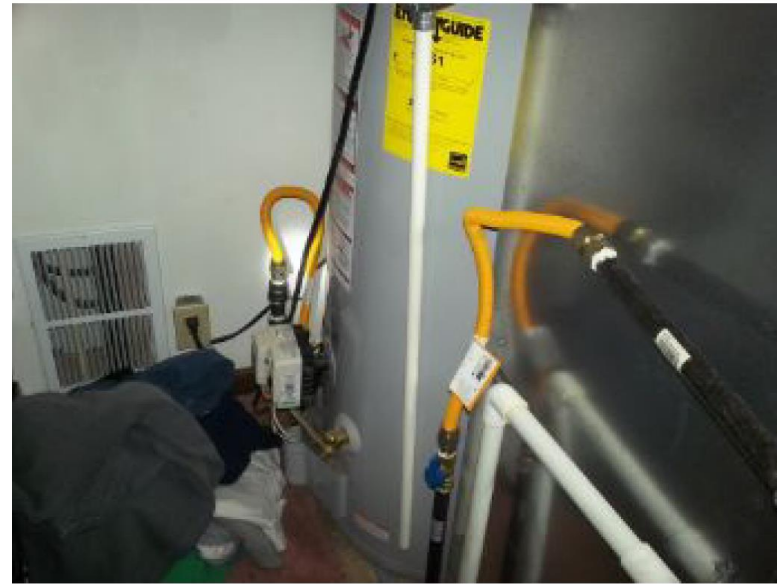
J box appropriate



central return +7.0; connected to garage



Furnace vent



bedroom closet; WH existing

Table 8-11: Combustion-Air Openings to Indoor Spaces:
Location and Size

Location	Dimensions
Combining spaces on the same story: Two openings, 1 within 12 inches of the top of the enclosure and 1 within 12 inches of the bottom of the enclosure	Minimum free area: 1 in ² per 1000 Btuh with a minimum of 100 in ²
Combining spaces in different stories: One or more openings in doors or floors	Minimum free area: 2 in ² per 1000 Btuh Input



Hole in wall behind WM is CAZ air tra grille from closet adjacent

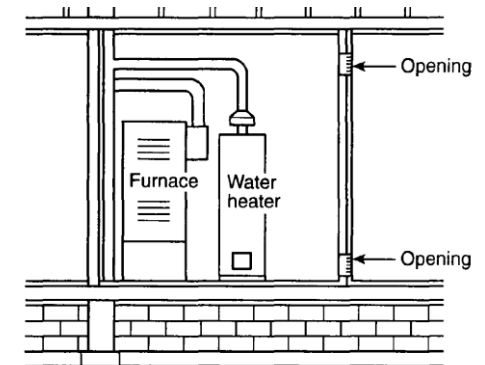


FIGURE A.9.3.2.3(1) All Combustion Air from Adjacent Indoor Spaces through Indoor Combustion Air Openings.

Rules we should agree on:

Field Guide: 10.5.3



Dryer vent types: Clothes dryer energy-efficiency depends on the type of vent material and the equivalent length of the vent.



foil



Foil



damaged termination; foil



Foil



Foil



Uninsulated dryer duct; MH on foundation



Foil

Air seal air seal air seal



AS fail; balloon walls/interior framing basement



Open balloon walls front crawls at main house



AS fail; balloon wall

Good work



center support wall; well done VB



WH closet; nice





Transfer grilles, yes



Sealed



Building wrap, foam; nice



Audit Tool

Plans to improve in the future

- Releasing the pictures before the report
- Faster reports
- What else

- Clearly have wx workers marked in the file
- Clearly state what you are considered H&S, Incidental repair and Base
- Don't change what you have reported in IWAP after the Monitoring process starts.

Don't get any finding or concerns

May there be no surprises in the coming close out. May your budgets balance and your close outs go smoothly.

For the coming grant cycle, I hope your deferral rates drop by over half and the homes you find be true energy savers that are clean and without infestation. May your clients be cooperative and appreciative, may they offer to move the clutter without you even asking. May those you oversee be supportive and dedicated to getting the job done well.

I truly hope you get to take the vacations you so honorably deserve.

May you never become weary in your commitment of making your communities better.

Thank you for your efforts.

